## RECEIVED

JUN 0 5 2002

TECH CENTER 1600/2900

<110> Ebner et <120> POLYNUCLEOTIDES ENCODING INTERLEUKIN-20 <130> PF399 <140> US 09/115,832 <141> 1998-07-15 <150> US 60/052,870 1997-07-16 <151> <150> US 60/055,952 1997-08-18 <151> <150> US 60/060,140 1997-09-26 <151> <160> 11 <170> PatentIn version 3.1 <210> 1 <211> 705 <212> DNA <213> Homo sapiens <220> <221> CDS <222> (45)..(587) <223> <220> <221> sig\_peptide <222> (45)..(104) <223> <220> <221> mat\_peptide <222> (105)..(584) <223> tccaggcggg cagcagctgc aggctgacct tgcagcttgg cgga atg gac tgg cct 56 Met Asp Trp Pro cac aac ctg ctg ttt ctt ctt acc att tcc atc ttc ctg ggg ctg ggc 104 His Asn Leu Leu Phe Leu Leu Thr Ile Ser Ile Phe Leu Gly Leu Gly 152 Gln Pro Arg Ser Pro Lys Ser Lys Arg Lys Gly Gln Gly Arg Pro Gly

SEQUENCE LISTING

	ro Gly Pro H		ctg gac ctg gt Leu Asp Leu Va	al Ser Arg			
			gag agg aac at Glu Arg Asn Il 45				
	ln Leu Arg A		ctg gcc cag ag Leu Ala Gln Ar 60				
			aag agg agc ct Lys Arg Ser Le 75				
	=		cgt atc ccc gt Arg Ile Pro Va				
Pro Glu Ala Ar			gtg aac ccc tt Val Asn Pro Ph 11	ne Thr Met			
cag gag gac co Gln Glu Asp Ar 115	gc agc atg g rg Ser Met V	tg agc gtg ccg al Ser Val Pro 120	gtg ttc agc ca Val Phe Ser Gl 125	ag gtt cct 488 In Val Pro			
	rg Leu Cys P		cgc aca ggg co Arg Thr Gly Pr 140				
			ggc tgc acc tg Gly Cys Thr Cy 155				
tgaattacct ggo	cccagaag cca	agac catcctcctt	catcctcctt gcacctttgt 644				
gccaagaaag gcctatgaaa agtaaacact gacttttgaa agcaaaaaaa aaaaaaaaa							
a				705			

C'NT

<210> 2

<211> 180

<212> PRT

<213> Homo sapiens

<400> 2

Met Asp Trp Pro His Asn Leu Leu Phe Leu Leu Thr Ile Ser Ile Phe -20 -15 -10 -5

Leu Gly Leu Gly Gln Pro Arg Ser Pro Lys Ser Lys Arg Lys Gly Gln  $^{-1}$   $^{1}$  1 5 10

Gly Arg Pro Gly Pro Leu Ala Pro Gly Pro His Gln Val Pro Leu Asp 15 20 25

1

Leu Val Ser Arg Met Lys Pro Tyr Ala Arg Met Glu Glu Tyr Glu Arg 30 35 40

Asn Ile Glu Glu Met Val Ala Gln Leu Arg Asn Ser Ser Glu Leu Ala 45 50 55 60

Gln Arg Lys Cys Glu Val Asn Leu Gln Leu Trp Met Ser Asn Lys Arg
65 70 75

Ser Leu Ser Pro Trp Gly Tyr Ser Ile Asn His Asp Pro Ser Arg Ile 80 85 90

Pro Val Asp Leu Pro Glu Ala Arg Cys Leu Cys Leu Gly Cys Val Asn 95 100 105

Pro Phe Thr Met Gln Glu Asp Arg Ser Met Val Ser Val Pro Val Phe 110 115 120

Ser Gln Val Pro Val Arg Arg Leu Cys Pro Pro Pro Pro Arg Thr 125 130 135 140

Gly Pro Cys Arg Gln Arg Ala Val Met Glu Thr Ile Ala Val Gly Cys 145 150 155

Thr Cys Ile Phe 160

<210> 3

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3

Met Thr Pro Gly Lys Thr Ser Leu Val Ser Leu Leu Leu Leu Leu Ser 1 5 10 15

Leu Glu Ala Ile Val Lys Ala Gly Ile Thr Ile Pro Arg Asn Pro Gly 20 25 30

Cys Pro Asn Ser Glu Asp Lys Asn Phe Pro Arg Thr Val Met Val Asn 35 40 45

Leu Asn Ile His Asn Arg Asn Thr Asn Thr Asn Pro Lys Arg Ser Ser 50 55 60

2

۱ ما

67

CM (M)

```
Asp Tyr Tyr Asn Arg Ser Thr Ser Pro Trp Asn Leu His Arg Asn Glu
Asp Pro Glu Arg Tyr Pro Ser Val Ile Trp Glu Ala Lys Cys Arg His
Leu Gly Cys Ile Asn Ala Asp Gly Asn Val Asp Tyr His Met Asn Ser
Val Pro Ile Gln Glu Ile Leu Val Leu Arg Arg Glu Pro Pro His
                             120
Cys Pro Asn Ser Phe Arg Leu Glu Lys Ile Leu Val Ser Val Gly Cys
                        135
Thr Cys Val Thr Pro Ile Val His His Val Ala
                    150
<210> 4
<211> 498
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (13)..(13)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (58)..(58)
<223> n equals a, t, g, or c
<220>
<221> misc feature
<222> (173)..(173)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (179)..(179)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (213)..(213)
<223> n equals a, t, g, or c
```

/

```
<220>
<221> misc_feature <222> (288)..(288)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (312)..(312)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (314)..(314)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (323)..(323)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (331)..(331)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (337)..(337)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (340)..(340)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (348)..(348)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (363)..(363)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (365)..(365)
<223> n equals a, t, g, or c
```

Cont

```
<220>
<223> n equals a, t, g, or c
 <220>
 <221> misc_feature
<222> (375)..(376)
 <223> n equals a, t, g, or c
 <220>
 <221> misc_feature
 <222> (386)..(386)
 <223> n equals a, t, g, or c
 <220>
 <221> misc_feature
 <222> (391)..(391)
 <223> n equals a, t, g, or c
 <220>
 <221> misc_feature
 <222> (393)..(393)
_<223> n equals a, t, g, or c
 <220>
 <221> misc feature
 <222> (395)..(395)
 <223> n equals a, t, g, or c
 <220>
 <221> misc_feature
 <222> (398)..(398)
 <223> n equals a, t, g, or c
 <220>
 <221> misc_feature
 <222>
       (403)..(405)
 <223> n equals a, t, g, or c
 <220>
 <221> misc feature
 <222> (407)..(407)
 <223> n equals a, t, g, or c
 <220>
 <221> misc_feature
 <222> (409)..(409)
 <223> n equals a, t, g, or c
```

```
<220>
<221> misc_feature
<222> (413)..(413)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (415)..(416)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (420)..(420)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (423)..(423)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (428)..(428)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (433)..(433)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (435)..(436)
<223> n equals a, t, g, or c
<220>
<221> misc feature
<222> (440)..(440)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (450)..(450)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (452)..(453)
<223> n equals a, t, g, or c
```

```
<220>
<221> misc_feature
<222>
      (460)..(460)
<223> n equals a, t, g, or c
<220>
<221>
      misc_feature
<222>
      (465)..(465)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
      (467)..(467)
<222>
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222>
      (470)..(470)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222>
      (475)..(476)
<223> n equals a, t, g, or c
<220>
<221> misc_feature
<222> (490)..(490)
<223> n equals a, t, g, or c
<220>
<221> misc feature
<222>
      (492)..(492)
<223> n equals a, t, g, or c
<400> 4
aatteggeac ganteeagge gggeageage tgeaggetga cettgeaget tggeggantg
                                                                      60
gactggcctc acaacctgct gtttcttctt accatttcca tcttcctqqq qctqqqccaq
                                                                     120
cccaggagcc ccaaaagcaa gaggaagggg caagggcggc ctgggcccct ggncctggnc
                                                                     180
ctcaccaggt gccactggac ctggtgtcac ggntgaaacc gtatgcccgc atggaggagt
                                                                     240
atgagaggaa catcgaggag atggtggccc agctgaggaa cagctcanag ctgggcccag
                                                                     300
agaaagtttg angntcaact ttncaagctt ntgggtnttn caacaagnag gtagcctgtt
                                                                     360
ttncntggng gttannagta tgaatncaag nancncangc gtnnntncng ttngnncttn
                                                                     420
tenggagnae gtntnnettn tttttttggn tnnttgaaen etttnanatn gtagnnggae
                                                                     480
ctagaattgn tnagggtg
                                                                     498
```

CINT

```
<210> 5
<211> 42
<212> DNA
<213> Artificial sequence
<220>
<223> Contains a Bam I restriction site
<400> 5
gatcgcggat cccagcccag gagccccaaa agcaagagga ag
                                                                      42
<210> 6
<211>
      47
<212> DNA
<213> Artificial sequence
<223> Contains a Hind III restriction site
<400> 6
gatcgcggta cccaggttta tcagaagatg caggtgcagc ccacagc
                                                                      47
<210> 7
<211> 53
<212> DNA
<213> Artificial sequence
<220>
<223> Contains a Bam HI restriction enzyme site and an efficient signal
       for initiation of translation in eukaryotic cells (Kozak, M., J.
       Mol. Biol. 196:947-950 (1987))
<400>
gategeggat eegecateat ggaetggeet cacaacetge tgtttettet tac
                                                                      53
<210> 8
<211> 47
<212> DNA
<213> Artificial sequence
<220>
<223>
      Contains an Asp 718 restriction site
<400>
gatcgcggta cccaggttta tcagaagatg caggtgcagc ccacagc
                                                                      47
<210> 9
<211> 53
<212> DNA
<213> Artificial sequence
<220>
<223> Contains an Asp 718 site, a Kozak sequence, and an AUG start codo
```

Cont

<400> gatcgo	9 :ggta	ccgc	catca	at g	gact	ggcci	t ca	caac	ctgc	tgti	tct	tct f	tac			53
<210><211><211><212><213>		ficia	al se	equei	nce											
<220> <223> Contains a Bam HI site																
<400> 10 gatcgcggat cccaggttta tcagaagatg caggtgcagc ccacagc										47						
<210><211><212><212><213>	11 126 PRT Homo	sap:	iens													
<400>	11															
Met As 1	p Trp	Pro	His 5	Asn	Leu	Leu	Phe	Leu 10	Leu	Thr	Ile	Ser	Ile 15	Phe		
Leu Gl	y Leu	Gly 20	Gln	Pro	Arg	Ser	Pro 25	Lys	Ser	Lys	Arg	Lys 30	Gly	Gln		
Gly Ar	g Pro 35	Gly	Pro	Leu	Ala	Pro 40	Gly	Pro	His	Gln	Val 45	Pro	Leu	Asp		
Leu Va		Arg	Met	Lys	Pro 55	Tyr	Ala	Arg	Met	Glu 60	Glu	Tyr	Glu	Arg		
Asn Il	e Glu	Glu	Met	Val 70	Ala	Gln	Leu	Arg	Asn 75	Ser	Ser	Glu	Leu	Ala 80		
Gln Ar	g Lys	Cys	Glu 85	Val	Asn	Leu	Gln	Leu 90	Trp	Met	Ser	Asn	Lys 95	Arg		
Ser Le	eu Ser	Pro 100	Trp	Gly	Tyr	Ser	Ile 105	Asn	His	Asp	Pro	Ser 110	Arg	Ile		
Pro Va	al Asp 115	Leu	Pro	Glu	His	Gly 120	Ala	Cys	Val	Trp	Ala 125	Val				

C/C